



Department of Energy
Office of Science
Washington, DC 20585

July 7, 2004

Office of the Director

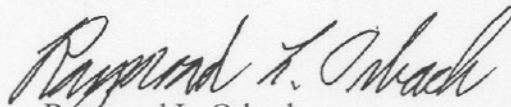
The Honorable Sherwood Boehlert
Chairman, Committee on Science
U. S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

In response to the House Report (107-112) accompanying the FY 2002 House Energy and Water Development Appropriations Bill, enclosed is the Department of Energy semi-annual report on the status of the facilities and infrastructure program at the Department's science laboratories. Though the report is specifically required to be submitted to the House Committee on Appropriations, we are providing it to all of the House and Senate authorization and appropriations committees with jurisdiction over the Office of Science. The enclosed report fulfills the requirement for the period ending March 31, 2004.

If you have further questions regarding this matter, please contact me directly at (202) 586-5430 or Ms. Deidra Ciriello, Deputy Assistant Secretary for Environment and Science, Office of Congressional and Intergovernmental Affairs, at (202) 586-8590.

Sincerely,


Raymond L. Orbach
Director

Enclosure

cc: The Honorable Bart Gordon
Ranking Minority Member



Printed with soy ink on recycled paper



Department of Energy
Office of Science
Washington, DC 20585

July 7, 2004

Office of the Director

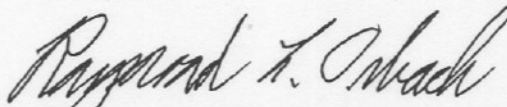
The Honorable David L. Hobson
Chairman, Subcommittee on Energy
and Water Development
Committee on Appropriations
U. S. House of Representatives
Washington, D.C. 20515-6020

Dear Mr. Chairman:

In response to the House Report (107-112) accompanying the FY 2002 House Energy and Water Development Appropriations Bill, enclosed is the Department of Energy semi-annual report on the status of the facilities and infrastructure program at the Department's science laboratories. Though the report is specifically required to be submitted to the House Committee on Appropriations, we are providing it to all of the House and Senate authorization and appropriations committees with jurisdiction over the Office of Science. The enclosed report fulfills the requirement for the period ending March 31, 2004.

If you have further questions regarding this matter, please contact me directly at (202) 586-5430 or Ms. Deidra Ciriello, Deputy Assistant Secretary for Environment and Science, Office of Congressional and Intergovernmental Affairs, at (202) 586-8590.

Sincerely,


Raymond L. Orbach
Director

Enclosure

cc: The Honorable Peter J. Visclosky
Ranking Minority Member



Printed with soy ink on recycled paper



Department of Energy
Office of Science
Washington, DC 20585

July 7, 2004

Office of the Director

The Honorable Pete V. Domenici
Chairman, Subcommittee on Energy
and Water Development
Committee on Appropriations
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In response to the House Report (107-112) accompanying the FY 2002 House Energy and Water Development Appropriations Bill, enclosed is the Department of Energy semi-annual report on the status of the facilities and infrastructure program at the Department's science laboratories. Though the report is specifically required to be submitted to the House Committee on Appropriations, we are providing it to all of the House and Senate authorization and appropriations committees with jurisdiction over the Office of Science. The enclosed report fulfills the requirement for the period ending March 31, 2004.

If you have further questions regarding this matter, please contact me directly at (202) 586-5430 or Ms. Deidra Ciriello, Deputy Assistant Secretary for Environment and Science, Office of Congressional and Intergovernmental Affairs, at (202) 586-8590.

Sincerely,

A handwritten signature in cursive script, reading "Raymond L. Orbach", is positioned above the printed name and title.

Raymond L. Orbach
Director

Enclosure

cc: The Honorable Harry Reid
Ranking Member



Printed with soy ink on recycled paper



Department of Energy
Office of Science
Washington, DC 20585

July 7, 2004

Office of the Director

The Honorable Pete V. Domenici
Chairman, Committee on Energy
and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In response to the House Report (107-112) accompanying the FY 2002 House Energy and Water Development Appropriations Bill, enclosed is the Department of Energy semi-annual report on the status of the facilities and infrastructure program at the Department's science laboratories. Though the report is specifically required to be submitted to the House Committee on Appropriations, we are providing it to all of the House and Senate authorization and appropriations committees with jurisdiction over the Office of Science. The enclosed report fulfills the requirement for the period ending March 31, 2004.

If you have further questions regarding this matter, please contact me directly at (202) 586-5430 or Ms. Deidra Ciriello, Deputy Assistant Secretary for Environment and Science, Office of Congressional and Intergovernmental Affairs, at (202) 586-8590.

Sincerely,

Raymond L. Orbach
Director

Enclosure

cc: The Honorable Jeff Bingaman
Ranking Member



Printed with soy ink on recycled paper

In the Conference Report (107-258) accompanying the Fiscal Year 2002 (FY 2002) Energy and Water Development Appropriations Act, Public Law 107-66, Congress established a new Facilities and Infrastructure (F&I) program to improve the facilities and infrastructure at the Department of Energy (DOE) science laboratories. It directed that at least 25 percent of this funding be used to dispose of excess facilities that will provide the greatest impact on reducing long-term costs and risks.

The House Report (107-112, page 116) accompanying the FY 2002 House Energy and Water Development Appropriations Bill requires that the Department provide a semi-annual report on the status of the F&I program to the Committee on Appropriations. Specifically, the report requires that:

The Department is required to submit a report to the Committee on the status of the facilities and infrastructure program. The report should include the current priority list of proposed facilities and infrastructure projects including cost and schedule requirements. For each site, the report is to include: a current ten-year site plan that demonstrates the reconfiguration of its facilities and infrastructure to meet its missions and to address its long-term operational costs and return on investment; the current budget for all facilities and infrastructure funding in this program, as well as all funding for maintenance and infrastructure upgrades funded through other parts of the budget; and the current status of each facilities and infrastructure project compared to the original baseline cost, schedule, and scope.

Reporting

This is the fifth semi-annual report required, as described above, to report on the status of the Office of Science (SC) F&I program. Because the genesis and development of the program have already been described in the semi-annual report for the first half of FY 2002, dated May, 2002, this report focuses primarily on the status of the program and related developments as of March 31, 2004, for the first half of FY 2004.

Current priority list of proposed facilities and infrastructure projects including cost and schedule requirements

The current priority list of excess facilities disposition projects is shown in Table 1. It shows a current backlog of 54 projects involving facility cleanup for reuse or demolition, with an estimated disposal cost of approximately \$19.5 million (based on very preliminary field estimates), an area of approximately 235,000 square feet, and an annual surveillance and maintenance (S&M) cost of approximately \$0.5 million. In addition to projects at SC laboratories, the list includes two projects involving demolition of Magnetic Fusion Energy legacy facilities at the Lawrence Livermore National Laboratory whose construction was funded by SC. It should be noted that the number of projects and their estimated cost has increased since the previous report, while their total area has decreased. This is due to identification of additional facilities which are, or will be, candidates for cleanup or demolition, and disposition of the larger, high-priority facilities previously identified.

18.1m
to 19.4m

sq. footage
268,000
to 235

The facilities in Table 1 are mostly those that were listed in the previous semi-annual report. The primary difference is inclusion of new projects and reordering of the priority of previous projects. As stated in previous reports, "individual projects and amounts are subject to revision based on evolving program priorities, including risk reduction (e.g., removal of hazards), footprint reduction, cost savings (e.g., elimination of surveillance and maintenance costs), and availability of space/land for new research activities." They are also subject to change based on more detailed planning and experience gained from disposition of current projects (e.g., better estimates of costs and changes in project sequences).

Table 1 also shows the projects that have been selected for funding in FY 2004 based on the enacted appropriation of \$6.02 million for the Science Laboratory Infrastructure (SLI) Excess Facilities Disposition subprogram. As a result of changes in the selection of projects for funding, the amount of space which is expected to be cleaned up or demolished by FY 2004-funded projects has increased from approximately 84,000 square feet to approximately 103,000 square feet since the President's FY 2005 budget request.

It should be noted that Table 1 does not include projects involving cleanout and stabilization of contaminated facilities that SC has proposed for transfer to the Office of Environmental Management (EM) for ultimate disposition. At issue are 29 process-contaminated facilities at SC laboratories with an estimated decontamination and decommissioning (D&D) cost of \$175 million. The D&D of these facilities is currently not included in the SLI Excess Facilities Disposition subprogram, and the Department is currently reviewing which organization will be responsible for their disposition.

ME-90
a SCI
agreed to
long.

Current ten-year site plans

With the issuance of DOE Order 430.1B, Real Property Asset Management, in September 24, 2003, SC will transition from Strategic Facilities Plans (SFPs) to the Ten Year Site Plans (TYSPs) required by the order. SC has issued guidance for preparation of the plans, which supplements that in the order, and requested that the plans be submitted by

November 1, 2004. An executive order on Federal real property asset management - No. 13327 issued on February 4, 2004 - requires the development of a comprehensive agency asset management plan, and the individual TYSPs will be critical to the formulation of the overall plan.

Previously, SC required each laboratory to prepare an SFP for modernizing its general purpose infrastructure to support its current and projected research mission over a ten-year period. The 2002 SFPs, which cover the period FY 2004 to FY 2013, are summarized in the April, 2003, SC summary report, "Update of the Laboratory Modernization Plans in the April 2001 Report 'Infrastructure Frontier, A Quick Look Survey of the Office of Science Laboratory Infrastructure.'" This report, and the SFPs, can be viewed on the Web at <http://www.science.doe.gov/SC-80/sc-82/labs21>. The SC summary identifies \$2.48 billion of potential capital and excess facilities projects over the ten-year period. Capital projects are Line Items (\$1.48 billion) and General Plant Projects (\$757 million). Most of the Line Item projects (84%) are for building rehabilitations and replacements.

The ten SC research laboratories, and the Oak Ridge Institute for Science and Education (ORISE), together have more than 1,500 buildings and 750 trailers with 20 million gross square feet of space and are aging. Nearly 47% of the building space is 40 years old or older. Over 7,000 employees and users of SC research facilities are housed in wooden buildings, trailers and buildings more than 50 years old.

Current budget for all facilities and infrastructure funding

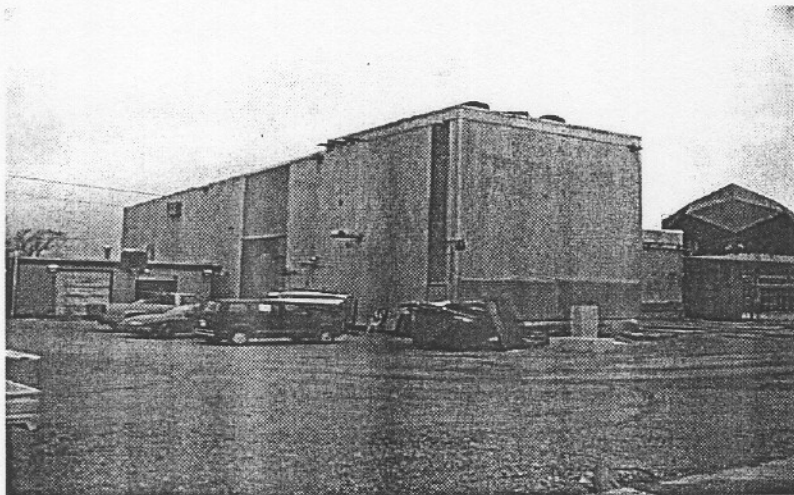
The enacted FY 2004 budget for SC facilities and infrastructure is shown in Table 2, including the funding under the Excess Facilities Disposition subprogram.

Current status of On-going Excess Facilities Disposition Projects

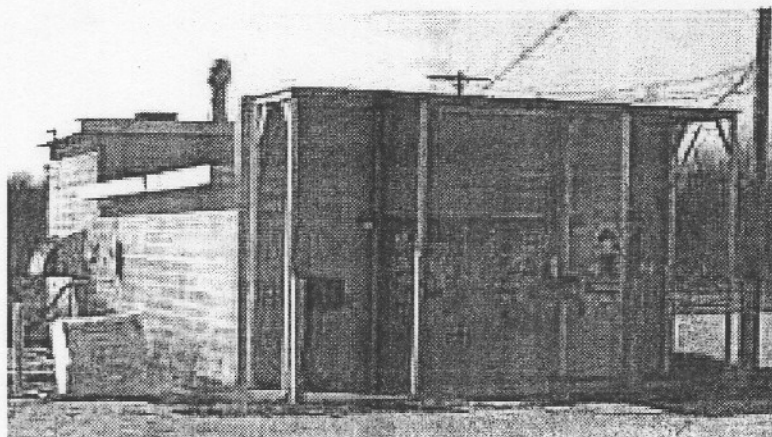
The current status of the projects funded by the SC Excess Facilities Disposition subprogram is summarized in Table 3. It includes projects funded with the FY 2004 appropriation, and FY 2003 projects which were listed in the previous semi-annual report as not completed. It should be noted that the latter set of projects should increase the area to be cleaned up or demolished in FY 2004 to approximately 365,000 square feet.

The House Energy and Water Development Appropriations Subcommittee directed that new and innovative D&D practices be implemented to reduce costs and expedite site cleanups, and cited an example of cost savings at the Rocky Flats site. Some of these practices have been described in the previous semi-annual reports. Generally, they involve salvage and recycling of materials generated in the cleanups and demolitions, and economies-of-scale achieved from bundling projects together, including projects funded from laboratory overhead. For example, close to 90% of the waste materials from demolition of the Bevatron EPB Hall at the Lawrence Berkeley National Laboratory were either salvaged or recycled. Since all of the FY 2004-funded projects are still in progress, any practices which reduce costs and expedite site cleanups will be discussed in the next semi-annual report.

Photographs of some of the facilities which have been, or will be, cleaned out or demolished in FY 2004 are attached.



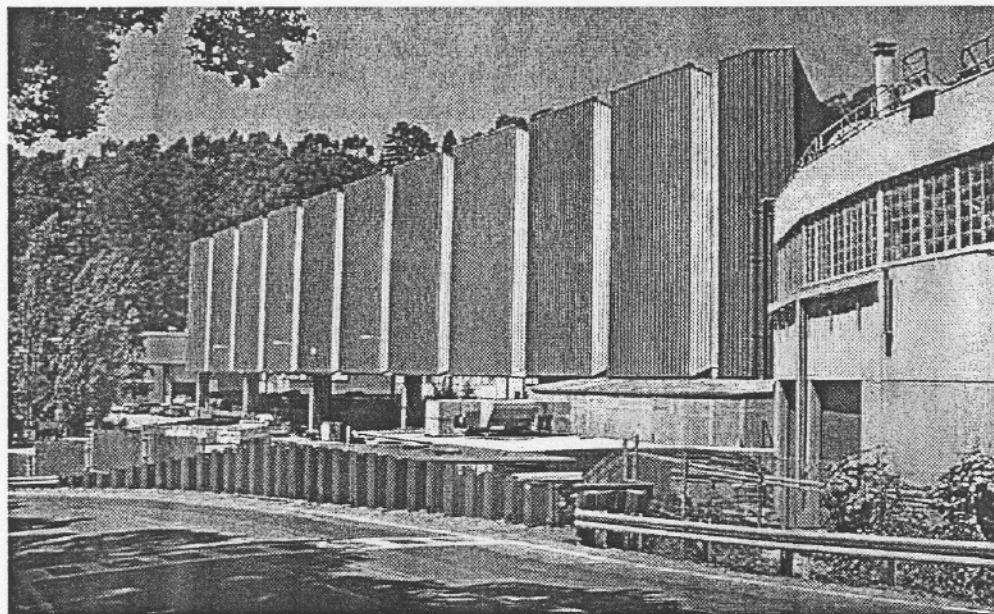
Fermi National Accelerator Laboratory Bubble Chamber Demolition Project



Argonne National Laboratory Bldg. 317 Baler Building Demolition Project

*New Pres
step
284*

*New Pres
step*



Lawrence Berkeley National Laboratory the Bevatron EPB Hall before Demolition



Lawrence Berkeley National Laboratory the Bevatron EPB Hall after Demolition



Oak Ridge National Laboratory Bldg. 7055 Demolition Project

Table 1 - Office of Science Facilities Disposition Projects - March 31, 2004

Lab	Project	Estimate of Disposal Cost (TEC)-\$K*	Square Footage	Annual S&M Savings-\$K	Fiscal Year of Cleanup
AMES	Waste Handling Facility Closeout and Demolition	\$ 150			2004
AMES	Waste Handling Facility Closeout and Demolition-Cont'd	\$ 150	9,000	\$ 30	2005
	Total FY04	\$ 150	0	\$ -	
	Total	\$ 300	9,000	\$ 30	
ANLE	Bldg. 202 (N&P Kennels) Partial Disposal	\$ 230	4,000	\$ 30	2004
ANLE	Bldg. 202,D-149 Lead Vault Demolition	\$ 230	192	\$ 9	2004
ANLE	Bldg. 205 G101 Junior Cave Remediation Project	\$ 289	200	\$ 18	2004
ANLE	Bldg. 317 Baler Building Demolition	\$ 192	1,100	\$ 26	2004
ANLE	Bldg. 329 Demolition	\$ 38	1,000	\$ 16	2004
ANLE	Bldg. 40 Demolition Project	\$ 230	4,896	\$ 31	2005
ANLE	Bldg. 200 Heavy Isotopes Hood/Equipment Demolition Project MA 202	\$ 75	1,170	\$ 13	2005
ANLE	Bldg. 205 F-111 Excess/Contaminated Media and Equipment Clean-up	\$ 800	1,000	\$ -	2005
ANLE	Site Beryllium Clean-up (Misc./Equipment Decontamination)	\$ 150	7,000	\$ -	2005
ANLE	Bldg. 205 K-116 Floor Cleanup & Equipment Demolition	\$ 95	920	\$ -	2005
ANLE	Bldg. 205 F-111 Vault Cleanup & Hood Demolition	\$ 220	870	\$ -	2005
ANLE	Bldg. 203 Storage Hole Clean-Up	\$ 50	240	\$ -	2005
ANLE	Bldg. 310 A-128 Assembly Room and RVACS Room Decontamination	\$ 500	1,200	\$ -	2005
ANLE	Site Cleanup/Disposal of Exterior Equipment Bone Yards	\$ 300	4,800	\$ -	TBD**
ANLE	Bldg. 205 H-125/H-126 Cell Decontamination	\$ 350	2,360	\$ -	TBD
ANLE	Bldg. 203 Service Floor Radium Cleanup	\$ 3,000	23,964	\$ -	TBD
	Total FY 04	\$ 979	6,492	\$ 100	
	Total	\$ 6,749	54,912	\$ 144	
BNL	Bldg 206/207/208/457/458 Demolition	\$ 725	33,655	\$ 5	2004
BNL	Bldg 88 Demolition	\$ 250	9,323	\$ 2	2004
BNL	Bldg 428 Demolition	\$ 120	1,642	\$ 1	2005
BNL	Bldg 197 (Partial, Acid bath Area) Demolition	\$ 50	1,546	\$ 1	2005
BNL	Bldg 422 (Partial, Fire Area-Old Paint Shop)	\$ 50	1,264	\$ 1	2005
BNL	Bldg 492 Demolition	\$ 80	1,243	\$ 1	2005
	Total FY04	\$ 975	42,978	\$ 7	
	Total	\$ 1,275	48,673	\$ 11	
FNAL	Bubble Chamber Demolition	\$ 233	3,000	\$ 35	2004
FNAL	Muon Enclosure Demolition-2	\$ 125	2,000	\$ 2	2005
FNAL	Muon Enclosure Demolition-16 (Minus Pilot and FY05)	\$ 848	5,123	\$ 13	TBD
	Total FY04	\$ 233	3,000	\$ 35	
	Total	\$ 1,206	10,123	\$ 50	
LBNL	Remove Upper Layer Roof Concrete Shielding Blocks & Beamline Components at the Bevatron	\$ 500		\$ -	2004
LBNL	Remove Shielding Blocks, Beamlines, etc., Three Transportainers, and Lead Dust Filters and Fan Equipment at the Bevatron	\$ 1,000	2,000		2004
LBNL	Remove Local Injector at the Bevatron	\$ 860	2,500		2005
LBNL	Trailer and Small Building Removal at the Bevatron	\$ 500	15,787	\$ -	2005
LBNL	Remove Upper Layer Roof Concrete Shielding Blocks & Beamline Components-Continued at the Bevatron	\$ 487	2,000		TBD
LBNL	Remove Misc Metal Equipment from Accelerator at the Bevatron	\$ 845	1,000	\$ -	TBD
	Total FY04	\$ 1,500	2,000	\$ -	
	Total	\$ 4,192	23,287	\$ -	
LLNL	Remove MFE Legacy Facilities at B445	\$ 250	8,000	\$ 3	2004
LLNL	Remove MFE Legacy Facilities at B445-Continued	\$ 300	7,000	\$ 3	2005
	Total FY04	\$ 250	8,000	\$ 3	
	Total	\$ 550	15,000	\$ 6	

Lab	Project	Estimate of Disposal Cost (TEC)-\$K*	Square Footage	Annual S&M Savings-\$K	Fiscal Year of Cleanup
ORISE	Bldg. SC-2, Isotope Laboratory, Demolition	\$ 565	952		2005
ORISE	Bldg. SC-5, Large Animal Containment Facility, Demolition	\$ 768	5,641		TBD
	Total FY04	\$ -	0	\$ -	
	Total	\$ 1,333	6,593	\$ -	
ORNL	Bldg. 2069/7010/2016/7055 Demolition	\$ 586	14,523	\$ 62	2004
ORNL	Bldg. 5000 Demolition	\$ 174	4,350	\$ 33	2004
ORNL	Bldg. 7009 Demolition	\$ 465	9,300	\$ 31	2005
ORNL	Bldg. 2018 Demolition	\$ 273	7,803	\$ 32	2005
ORNL	Bldg. 3111 Demolition	\$ 25	100	\$ 1	2005
ORNL	Bldg. 7079 Demolition	\$ 17	172	\$ 1	2005
ORNL	Bldg. 3008 Demolition	\$ 71	565	\$ 2	TBD
ORNL	Bldg. 7061 Demolition	\$ 58	1,060	\$ 1	TBD
ORNL	Bldg. 7020 Demolition	\$ 48	960	\$ 1	TBD
ORNL	Bldg. 7058 Demolition	\$ 50	1,008	\$ 1	TBD
ORNL	Bldg. 7065 Demolition	\$ 48	960	\$ 1	TBD
ORNL	Bldg. 7066 Demolition	\$ 48	960	\$ 1	TBD
	Total FY04	\$ 760	18,883	\$ 95	
	Total	\$ 1,864	41,771	\$ 167	
PPPL	PBX-M/PLT Subsystem Removals and C-site Cooling Tower Demolition	\$ 980	18,200	\$ 55	2004
	Total FY04	\$ 980	18,200	\$ 55	
	Total	\$ 980	18,200	\$ 55	
SLAC	B Target Room (End Station B Building) Cleanout	\$ 150	3,000	\$ 10	2004
SLAC	Demolish HRS Detector in Bldg 660	\$ 400	2,000	\$ -	2005
SLAC	Demolish Mark II Detector in Bldg 750	\$ 330	2,000		TBD
SLAC	Demolish Portion of Sector 17 "Boneyard"	\$ 150		\$ -	TBD
	Total FY04	\$ 150	3,000	\$ 10	
	Total	\$ 1,030	7,000	\$ 10	
HQ	Reserve	\$ 43			2004
	Total FY04	\$ 43			
	Total	\$ 43			
	FY 04 Totals	\$ 6,020	102,553	\$ 305	
	All Projects	\$ 19,479	234,559	\$ 473	

* Cost estimates for projects beyond FY 2004 are very preliminary estimates based on field requests. These costs will be refined prior to the projects being funded.

** TBD - to be determined.

Table 2 - Office of Science FY 2004 Facilities and Infrastructure Funding (\$1000s)

Laboratory	SLI Infrastructure Line Item Construction	GPP	Excesss Facilities Disposition*	Total SC Direct-Funded Infrastructure Investment**	Maintenance	Institutional GPP***
Ames		\$ 515	\$ 150	\$ 665	\$ 742	
ANL-E	\$ 5,152	\$ 4,950	\$ 979	\$ 11,081	\$ 18,059	
BNL	\$ 5,971	\$ 6,144	\$ 975	\$ 13,090	\$ 19,911	
LBNL	\$ 2,000	\$ 3,500	\$ 1,500	\$ 7,000	\$ 11,700	
FNAL		\$ 6,630	\$ 233	\$ 6,863	\$ 7,290	
LLNL			\$ 250	\$ 250		
ORNL	\$ 9,600	\$ 5,815	\$ 760	\$ 16,175	\$ 23,647	\$ 6,000
ORISE		\$ 1,150		\$ 1,150	\$ 461	
PNNL	\$ (1,971)	\$ 3,500		\$ 1,529	\$ 1,311	\$ 1,000
PPPL		\$ 1,415	\$ 980	\$ 2,395	\$ 3,743	
Sandia		\$ 103		\$ 103		
SLAC	\$ 1,988	\$ 4,505	\$ 150	\$ 6,643	\$ 4,300	
TJNAF	\$ 9,019	\$ 460		\$ 9,479	\$ 2,200	
All Others		\$ 581	\$ 43	\$ 624	\$ 3,661	
Total SC Budget	\$ 31,759	\$ 39,268	\$ 6,020	\$ 77,047	\$ 97,025	\$ 7,000

* The total of \$6,020 shown is the result of a rescission from the FY 04 appropriated amount of \$6,055.

** Total of SLI Infrastructure Line Item Construction, GPP and Excess Facilities Disposition.

*** Funded from laboratory overhead or space charges. IGPP is a pilot program currently under review.

Semi-Annual Report: March 31, 2004

Project Number	Project	Estimated Cost - \$ Thousands	Square Footage to be Removed/Cleaned-Up	Status of Project	Cost/Scope/Schedule
04-AMES-1	Waste Handling Facility Closeout and Demolition	\$ 150		Cleanout underway	Within Baseline
03-ANL-2*	Bldg. 306 Room D-001 and D-002 Cell Decontamination	\$ 250	550	Completed	3.5% above cost baseline because of high level of contamination encountered
04-ANL-1	Bldg. 202 (N&P Kennels) Partial Disposal	\$ 230	4,000	Demolition underway	Within Baseline
04-ANL-2	Bldg. 202/D-149 Lead Vault Demolition	\$ 230	192	Ready for demolition	Within Baseline
04-ANL-3	Bldg. 205 G101 Junior Cave Remediation Project	\$ 289	200	Ready for cleanout	Within Baseline
04-ANL-4	Bldg. 317 Baler Building Demolition	\$ 192	1,100	Planning	
04-ANL-5	Bldg. 329 Demolition	\$ 38	1,000	Planning	
04-BNL-01	Bldg 206/207/208/457/458 Demolition	\$ 725	33,655	Asbestos removal	Within Baseline
04-BNL-02	Bldg 88 Demolition	\$ 250	9,323	Planning	Within Baseline
03-FNAL-01*	Muon Enclosures Pilot Program-4	\$ 240	3,533	Cleanout underway	Completion delayed due to discovery of unprotected telephone cables
04-FNAL-01	Bubble Chamber Demolition	\$ 233	3,000	Demolition underway	Within Baseline
03-LBNL-01*	Remove B51A Beamline at the Bevatron	\$ 950	3,900	Completed	Area increased to 5,400 sq. ft.
03-LBNL-02*	Demolish Bevatron EPB Hall	\$ 1,500	43,911	Completed	Area increased to 44,775 sq. ft.
04-LBNL-01	Remove Upper Layer Roof Concrete Shielding Blocks & Beamline Components at the Bevatron	\$ 500		Procurement	Within Baseline
04-LBNL-02	Transportainers, and Lead Dust Filters and Fan Equipment at the Bevatron	\$ 1,000	2,000	Cleanout underway	Within Baseline
04-LLNL-01	Remove MFE Legacy Facilities at B445	\$ 250	8,000	Planning	Within Baseline
03-ORNL-01*	Bldg. 9204-1 Cleanout	\$ 1,500	210,491	Completed	Cost increased to \$1,650K due to discovery of additional contaminated material. Additional cost funded from lab overhead.
04-ORNL-01	Bldg. 2069/7010/2016/7055 Demolition	\$ 586	14,523	Facility/utility deactivation	Within Baseline
04-ORNL-02	Bldg. 5000 Demolition	\$ 174	4,360	Demolition underway	Within Baseline
04-PPPL-01	PBX-MPLT Subsystem Removals and C-site Cooling Tower Demolition	\$ 980	18,200	Cleanout underway	Within Baseline
03-SLAC-03*	Remove Remaining Excess Utility Lines	\$ 13		Near completion	Within Baseline
04-SLAC-01	B Target Room (End Station B Building) Cleanout	\$ 150	3,000	Planning	Within Baseline
HQ	Reserve	\$ 43			
	Total FY 2004	\$ 6,020	364,938		

* FY 2003 project completed in FY 2004. Not included in total FY 2004 funding.